

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

:

Koji YANAI et al.

Attn: Application Branch

Serial No. NEW

Filed November 23, 2001

Attorney Docket No. 2001-1611

β-FRUCTOFURANOSIDASE AND ITS GENE, METHOD OF ISOLATING β-FRUCTOFURANOSIDASE GENE, SYSTEM FOR PRODUCING β-FRUCTOFURANOSIDASE, AND β-FRUCTOFURANOSIDASE VARIANT (Rule 1.53(b) Divisional Application of Serial No. 09/142,623, Filed September 10, 1998)

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents, Washington, DC 20231

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. <u>09/142,623</u>, filed September 10, 1998.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing date of the first Office Action on the merits,

and thus no certification and/or fee is required. 1b. [] This Information Disclosure Statement is submitted after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus: (1) [] the certification of paragraph 2 below is provided, or (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed. 1c. [] This Information Disclosure Statement is submitted: after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus: the certification of paragraph 2 below is provided, and the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed. It is hereby certified 2. that each item of information contained in this Information Disclosure Statement a. [] was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or that no item of information contained in the Information Disclosure Statement b. [] was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement. Consideration of the following list of additional information (including any copending or 3. [] abandoned U.S. application, prior uses and/or sales, etc.) is requested.

For each non-English language reference listed on the attached form PTO-1449, reference 4. is made to: a full or partial English language translation submitted herewith, a. [] a foreign patent office search report (in the English language) submitted b. [X] herewith, the concise explanation contained in the specification of the present application c. [] at page, d. [X] the concise explanation set forth in the English language abstract, submitted to the Patent Office in prior parent application Serial No. 09/142,623. the concise explanation set forth below or on a separate sheet attached to the e. [] reference: [X] Also enclosed is a copy of the International and European Search reports citing some 5. of the references and International Preliminary Examination Report. [] Applicants also offer the following comments for the Examiner's consideration: 6.

Respectfully submitted,

Koji YANAI et al.

By Lee Cheng

Registration No. 40,949

Attorney for Applicants

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U.S. PATENT DOCUMENTS										
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)										
RH	AG	L.M. BODDY et al., "Purification and Characterisation of an <i>Aspergilus niger</i> invertase and its DNA sequence", Current Genetics, Vol. 24, pp. 60-66, (1993).								
RH	АН	G. BLATCH et al., "Molecular Characterization of a Fructanase Produced by <i>Bacteroides fragilis</i> BF-1", Journal of Bacteriology, Vol. 175, No. 10, pp. 3058-3066, May 1993.								
RH	AI	M. HIRAYAMA et al., "Purification and Properties of a Fructooligosaccharide-producing $\beta$ -Fructofuranosidase from <i>Aspergillus niger</i> ATCC 20611", Agricultural and Biological Chemistry, Vol. 53, No. 3, pp. 667-673 (1989).								
RY	AJ	Y. Hatayama et al., "The purification of β-Fructofuranosidase from <i>Scopulariopsis brevicaulis</i> N-01", Nippon Nogeikagaku Kaishi, Vol. 824 (70), pg 297 (1996).								
RP	AK	Yoshiaki Hatakeyama et al., "Kinetic Parameters of $\beta$ -Fructofuranosidase from <i>Scopulariopsis brevicaulis</i> ", Journal of Fermentation and Bioengineering, Vol. 81 (6), pp 518-523 (1996).								
RH	AL	Toyohiko Nakamura et al., "Occurrence of Two Forms of Extracellular Endoinulinase from <i>Aspergillus niger</i> Mutant 817", Journal of Fermentation and Bioengineering, Vol. 78, No. 2, pp. 134-139 (1994)								
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.